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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,891	06/27/2003	Kevin V. Gray	1078-5	7808
23869	7590	04/06/2005	EXAMINER	
HOFFMANN & BARON, LLP 6900 JERICHO TURNPIKE SYOSSET, NY 11791			SHARMA, RASHMI K	
			ART UNIT	PAPER NUMBER
			3651	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,891

Applicant(s)

GRAY, KEVIN V.

Examiner

Rashmi K. Sharma

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10, 12, 14, 15, 21, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 11, 13, 16-20, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/27/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the Figures 2-4, 6 and 7 can not be viewed properly, as to exactly what structure in the drawings is being referred to by the reference numerals. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the spray heads being positioned at various angles, the circular groove with respect to the opposing planes, the drainage opening, the drip edge, the distance X and the pair of spray bars within the rear compartment must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

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and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: it appears as though page 7 line 7 should recite "...defines substantially..."; page 7 line 9 should recite "...to allow passage..."; page 10 line 8 should recite "...with either...". Appropriate correction is required.

Claim Objections

Claims 1, 2 and 9 are objected to because of the following informalities: it appears that claim 1 line 6 should recite "...at least one *spray*..."; claim 1 line 16 should recite "...*spray*..."; claim 2 should recite "...of said diameter D". It. Appropriate correction is required.

Claim 9 recites a depth of the groove being approximately .6 inches, however the claim from which claim 9 is dependent upon, claim 8 recites that the groove has depth

of between .03 to .125. The .6 inches depth fails to fall within the range claimed in claim 8. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 10, 15 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 24 recite the limitation "the other of said opposing planar". There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites "wherein said opposing planar surface of said belt is supported by a plurality of tracks". It is unclear as to which opposing surface the Applicant is referring to. Did the Applicant intend to claim both planar surfaces? Further clarification is required.

Claim 15 recites "...said drip edge being set back a distance X in a direction towards said trailing edge". This recitation appears to be confusing. It seems as though the leading edge forming a drip edge would be set forward from the trailing edge. Further clarification is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 7, 10, 14, 21, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malmberg et al. (U.S. Patent number 5,598,915) in view of Simonetti et al. (U.S. Patent number 5,307,993).

Malmberg et al. discloses a conveyor belt washer for cleaning a moving conveyor belt (5) with a pressurized fluid, the belt (5) having opposing planar surfaces, the washer comprising an enclosed washtank (1) sized and configured to allow the belt (5) to movably pass therethrough, at least one spray assembly (11) located within the washtank (1) and positioned adjacent one of the opposing planar surfaces (please read column 2 lines 22-28), at least one spray head (12) being rotatably mounted with respect to the washtank (1), a pair of splash plates (any two sides of 15 in Figure 1) defining a substantially planar splash surface mounted within the washtank (1) and positioned adjacent the opposing planar surfaces (see Figure 1), wherein the pressurized fluid passing through the belt is continuously redirected against the opposing planar surfaces upon contact with the splash surface as the spray head (12) is rotated, wherein the spray assembly (11) provides gravity-based drainage thereof through the spray heads (12) upon disconnection of the pressurized fluid. Malmberg also discloses the splash plate (15) including a groove (please read column 2 lines 29-

37) wherein the splash surface is located within the groove, wherein the opposing planar surfaces of the belt (5) is supported by a plurality of tracks (6), wherein a leading edge (see Figure 2) of the washtank (1) has a slot (see Figure 1) for passage of the belt (5) therethrough to allow the belt (5) to enter the washtank (1) and a trailing edge (see Figure 2) having a slot sized for passage of the belt (5) therethrough to allow the belt to exit the washtank (please read column 2 lines 14-16), a bottom portion of the washtank (1) being angled (see Figure 1) to facilitate the collection and drainage of the pressurized fluid and each spray head having at least one nozzle.

Malmberg et al. as disclosed above, fails to show the spray head being rotatable through a circular path having a predetermined diameter D, a spin axis Y, the spray heads being positioned $\frac{1}{2}$ the distance of the diameter D, fluid bars extending between the spray heads and the spin axis Y, a bearing located on the spin axis Y, a connection port and a circular groove.

Simonetti et al. does disclose a spray head (32) being rotatable through a circular path having a predetermined diameter D and being positioned $\frac{1}{2}$ the distance of the D, a spin axis Y, fluid bars (16), a bearing (14 or the topmost portion above 14 in Figure 1) and a connection port (18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace Malmberg's spray head arrangement with that of Simonetti's spray head arrangement in order to provide for a relatively wider cleaning area of the belt per spray head and the rotary motion of each spray head also allows for the cleaning agent to impinge any dirt on the belt from different directions thereby

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allowing for the detachment of the dirt to be more easily accomplished. It also would have been obvious to one having ordinary skill in the art at the time the invention was made to provide for the splash plate to have a circular groove in order to provide for a variety of shapes depending on the user's need.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malmberg et al. (U.S. Patent number 5,598,915) in view of Simonetti et al. (U.S. Patent number 5,307,993) and further in view of JP 09038596.

Malmberg et al. as modified by Simonetti et al. as disclosed above, fail to show spray heads having varying angled positions above the belt.

JP 09038596 does disclose spray heads having varying angled positions above the belt (see Figure 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to alter the spray head positioning of Malmberg as modified by Simonetti with that of JP'596's angled spray heads in order to provide for an additional arrangement that allows for the cleaning agent to impinge any dirt on the belt from the

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different angles thereby allowing for the detachment of the dirt to be more easily accomplished.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malmberg et al. (U.S. Patent number 5,598,915) in view of Simonetti et al. (U.S. Patent number 5,307,993) and further in view of Smith (U.S. Patent number 4,955,209).

Malmberg et al. as modified by Simonetti et al. as disclosed above, fail to show a splash plate being formed from ultra high molecular weight plastic.

Smith does disclose ultra high molecular weight plastic used within a conveyor.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the material used in Smith's invention for that of the splash plate of Malmberg's invention in order to provide for a flexible yet strong splash plate. It should be noted that ultra high molecular weight plastic is very well known in the conveying art.

Allowable Subject Matter

Claims 8, 9, 11, 13, 15-20, 22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Dependent claims recite the structural limitation of a belt washer comprising a depth of the groove to be .03 to .125 inches and a width of 1 to 4 inches, the tracks being capped with a wearstrip wherein the wearstrip is positioned to be substantially flush with the splash plate, a drainage opening communicating with the groove for allowing the pressurized fluid to drain, the leading edge forming a drip edge to facilitate the containment of the pressurized fluid within the tank and a rear compartment within the washtank adjacent the trailing edge for drying the belt, the rear compartment including a pair of spray bars positioned on one side of the belt to form an air curtain to facilitate drying of the belt and containment of the pressurized fluid within the tank, in combination with the rest of the recited structure, clearly defines over the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rashmi K. Sharma whose telephone number is 571-272-6918. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571-272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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